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III. REMARKS

Claim Status

Claims 1-15 were in the case and stand rejected. Claims 1-3, 8-9 and 13 have been cancelled, claims 4-7, 10-12 and 14-15 have been amended. Claims 16-21 are newly presented.

Claim Rejections - 35 USC § 112

Claims 1-15 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claims 1-15 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention as being generally narrative and indefinite.

Claim 1-3, 8-9, and 13 have been cancelled.

Claims 10-11 recite "it". The examiner is unclear as to what "it" is. The antecedent to it is "wine". It is respectfully submitted that the referent to "it" is now clear and reconsideration is requested.

Claim 14 recites "hydroxides, carbonates, tartrates and acetates of sodium, potassium and calcium". The examiner is unclear as to what compounds are being claimed. What is being claimed are the listed salts where the cation is sodium, potassium and calcium and the anion is selected from hydroxides, carbonates,

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tartrates and acetates. This claim has been amended for clarity to obviate this ground for rejection.

Claim 15 recites the limitation "the first stage membrane". The examiner believes there is insufficient antecedent basis for this limitation in the claim. Claim 15 has been amended to obviate this ground for rejection.

Claim Rejections - 35 USC § 102

Claims 1, 5, 7, and 15 stand rejected under 35 U.S.C. 102(b) as being anticipated by Bonneau [US 4,499,117].

The examiner states that Bonneau teaches a batch process for treating wine by using a first stage comprising ultrafiltration through a membrane to produce a first permeate and a first concentrate, a second stage comprising reverse osmosis via a membrane to produce a second concentrate and a second permeate, where there is a resulting reduction of volatile acidity, and where pressure is utilized.

Applicant traverses this ground for rejection.

There are several differences between Bonneau's process and applicant's process. First, Bonneau discloses a three [3] step process prior to recombining the various fractions. Applicant discloses a two [2] step process prior to recombining the various fractions.

Second, Bonneau specifically is directed to reducing the alcohol content in wine. On the contrary, the present invention refers to a reduction of the volatile acidity in

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the wine without "affecting other compounds, especially acid ones, which contribute to the quality of wine" - see par. [0006] of the printed US specification No. 2004/0197439. One "other compound" that remains substantially unaltered is tartaric acid - see par. [0036 and 0037] - and an "other compound" affecting the quality of wine is alcohol. Thus, Bonneau teaches away from applicant's invention.

Thus, claims 1, 5, 7 and 15 are not anticipated by Bonneau.

Furthermore, Bonneau utilizes either normal pressure in his first process step [Example 1 and following] or low pressure [claims, esp. claim 1(a) "under low pressure"]. Applicant utilizes high pressure in both of his two process steps.

Thus, on this additional basis, claim 5 is not anticipated by Bonneau.

Bonneau refers to the reduction of the alcoholic level in a beverage by a process comprising a step where a previously obtained ultrafiltrate is vacuum distilled at low temperature - see item (c) in claim 1. The process also leads, as a side effect presumably due to the vacuum distillation, to a reduction not only of the volatile acidity but also of the total acidity and even of the extract (dry), particularly in case of red wine, according to the examples provided in the specification.

At no place does Bonneau state, suggest or imply the benefit of recycling the downstream fractions to the earlier portion of the process for continued processing.

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Claim Rejections - 35 USC § 103

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonneau in view of Smith [US 5,480,665].

The examiner acknowledges that Bonneau does not recite mixing the second permeate and first concentrate with the initial solution or a continuous process.

The examiner cites Smith as teaching a continuous process for treating wine by a first stage comprising filtration through a membrane to produce a first permeate and a first concentrate, a second stage comprising separation to produce a second concentrate and a second permeate, and mixing the second permeate and first concentrate with the initial solution.

The examiner concludes that it would have been obvious to one of ordinary skill in the art to incorporate the continuous recycling of Smith into the invention of Bonneau since both are directed to methods of treating wine.

Applicant traverses this ground for rejection.

The two processes cited, Bonneau and Smith, are incompatible and if combined somehow would not solve the problem solved by applicant.

Smith was extensively discussed in applicant's response to the last office action. Those comments still apply.

In summary, Smith discloses methods of treating wine by reverse osmosis, optional low-energy distillation and

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treatment in an anion exchange column, the permeate from which is recombined with the retentate from the reverse osmosis step. This combined fraction may be recirculated to the reverse osmosis step.

Thus Smith utilizes different process steps, in a different order, than either Bonneau or applicant.

Bonneau specifically states that the specific sequence of steps disclosed is required [col. 2, lines 58-61], thus prohibiting the substitution of the different steps disclosed by Smith. Applicant also has recognized Smith, in his specification, at paragraph 0007 of the printed specification, as disclosing a prohibited process, using anion exchange resins which cannot be used in certain countries. One of the expressed purposes of applicant's invention is to provide an alternative process.

In addition to the legal constraints, Smith's resins retain all of the acid substances present in a permeate, thus affecting negatively the quality of the wine and, in the instance of a "strong" red wine, the natural colorants can interact with the resins in a manner that their efficiency and useful life are diminished.

In conclusion, Smith is so dissimilar from either Bonneau or applicant's process that one skilled in the art would not consider Smith a compatible with either.

Claims 3-4, 8, and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bonneau as applied above, in view of Vialette nee Geolier [US 4,461,778].

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The examiner acknowledges that Bonneau does not recite an intermediate stage which adds substance to the first permeate, the substances being sodium, potassium, or calcium compounds, means for performing the intermediate stage, and the substances being hydroxides, carbonates, tartrates and acetates of sodium, potassium and calcium.

The examiner states that Vialette nee Geolier teaches a process for deacidifying wine by adding calcium carbonate or calcium tartrate to the wine (column 2, line 19) and concludes that it would have been obvious to one of ordinary skill in the art to incorporate the deacidifying step of Vialette nee Geolier into the invention of Bonneau since both are directed to methods of treating wine.

Applicant traverses this ground for rejection.

Vialette nee Geolier discloses a process for the removal of maleic acid in the form of tartromalate from wine. However, maleic acid is not a volatile compound of the wine and is therefore directed to a process unlike that of applicant whose process is limited to the reduction of "volatile acid compounds" in the wine.

Applicant, at page 5, lines 11-13 of his specification, specifically cautions against the removal of other compounds while the volatile acids are being removed. Thus, applicant's specification expressly states that a process such as Vialette nee Geolier's should not be used.

In conclusion, Bonnier and Vialette nee Geolier, even if combined against the express prohibition in applicant's

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specification, would not disclose or suggest applicant's process.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonneau, in view of Vialette nee Geolier, as applied above, and further in view of Heess et al. [US 4,322,446].

The examiner acknowledges that Bonneau and Vialette nee Geolier do not recite an upright container with a grille, a tank, and a siphon.

The examiner cites Heess et al as teaching a device for treating wine by passing it through a tank with a bottom drain or siphon, the tank containing upright containers comprising grilles that hold calcium tartrate (Figure 1).

The examiner concludes that would have been obvious to one of ordinary skill in the art to incorporate the structure of Heess et al into the invention of Bonneau, in view of Vialette nee Geolier, since all are directed to wine treating methods and devices.

Applicant traverses this ground for rejection.

As set forth above, Bonneau, in view of Vialette nee Geolier, as applied above, does not render obvious applicant's process, nor do they render obvious applicant's apparatus since no specific apparatus is disclosed, in particular apparatus containing pressure means for both the first and second steps of the process.

Additionally, Heess et al. apparatus contains a heat

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exchanger [1], a cooler [2], an external sheet filter [6], and a single stabilizing unit [4]. Heess also includes, within the stabilizing unit, grilles that hold calcium tartrate.

But Heess' has only one "stabilization unit" and that single "stabilization unit" is completely unlike applicant's process stages at least one of which contains internal membrane means for separation.

Heess therefore describes significantly different apparatus and is inapposite.

Applicant requests favorable reconsideration of this ground for rejection.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonneau, in view of Vialette nee Geolier, as applied above, and further in view of CN 1133882A.

The examiner acknowledges that Bonneau and Vialette nee Geolier do not recite filter means before initial processing. The examiner cites CN 1133882A as teaching a device for treating wine including a filter means (abstract) and concludes that it would have been obvious to one of ordinary skill in the art to incorporate the filtering means of CN 1133882A into the invention of Bonneau, in view of Vialette nee Geolier, since all are directed to devices for treating wine, Bonneau already included fine filtering such as ultrafiltration and reverse osmosis, and the preliminary filtering of CN 1133882A would

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prevent larger particles from clogging the ultrafiltration membrane of Bonneau.

Applicant traverses this ground for rejection.

The addition of CN 1133882A does not cure the failure of Bonneau and Vialette nee Geolier, alone or in combination, to disclose or suggest applicant's process for the reasons set forth above.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonneau, in view of Vialette nee Geolier, as applied above, and further in view of Smith.

The examiner acknowledges that Bonneau and Vialette nee Geolier do not recite a first reservoir and a second reservoir. The examiner states that Smith teaches a device for treating wine comprising a first reservoir and a second reservoir and concludes that it would have been obvious to one of ordinary skill in the art to incorporate the reservoirs of Smith into the invention of Bonneau, in view of Vialette nee Geolier, since all are directed to devices for treating wine, since Bonneau and Vialette nee Geolier would have required some means for holding the various solutions and components, and since the reservoirs of Smith provided a convenient and efficient means for holding wine and its components.

Applicant traverses this ground for rejection.

Vialatte nee Geolier discloses a process for deacidifying liquids by adding calcium, carbonate, potassium carbonate,

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calcium tartrate and a calcium double salt of tartaric and malic acids to the liquid. Crystals of tartromalate precipitate.

The only point of similarity between the instant process and Vialatte nee Geolier appears to be that they both describe processes for deacidification of liquids. It is noted that Vialatte nee Geolier discloses a recycle step at col. 4, lines 57 et seq. but this is a recycle of a liquid deacidified by a process entirely different from the instant process and which is subjected to further processing entirely different from the instant process.

Smith discloses methods of treating wine by reverse osmosis, optional low-energy distillation and treatment in an anion exchange column the permeate from which is recombined with the retentate from the reverse osmosis step. This combined fraction may be recirculated to the reverse osmosis step.

What the examiner has done is pick small parts of three incompatible processes, each using different apparatus [heat exchangers, cooling apparatus] for different purposes [removing alcohol, removing maleic acid] using different process steps [Bonneau expressly prohibits this] and now, with hindsight, argues that one examining these references would pick the precise bits picked by the examiner. This is impermissible under US practice and does not result in a prima facie case being made.

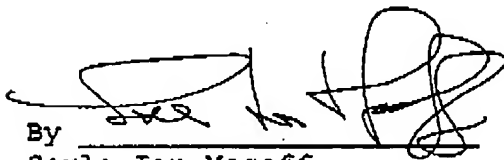
Applicants respectfully request reconsideration.

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The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 14-1263.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Serle Ian Mosoff', is written over a horizontal line.

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